

Notice of Allowability

Application No.

09/672,007

Applicant(s)

KRONESTEDT, CARL FREDRIC
ULF

Examiner

Inder P Mehra

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment dated: 1/25/05.
2. ☒ The allowed claim(s) is/are 1-5, 7-10, 12, 11, 13-16 (Renumbered as 1-17 respectively).
3. ☒ The drawings filed on 29 September 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>3/3/05</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>2/12/01</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. This office action is in response to amendments dated: 12/16/2004 and 1/25/2005. Based on these amendments, claims 1-5, 7-17 and 19 have been amended in amendment dated: 1/25/05. Claims 6 and 18 were cancelled in amendment dated: 6/23/04. At present, claims 1-5, 7-17 and 19 are pending.

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steven W. Smith, Regd. No. 36,684, on February 28, 2005. The application has been amended as follows:

a. Claim 13 has been replaced by the following claim:

13. (Currently Amended) A method of controlling a radio link (RL) in a mobile radio network (PLMN) for maintaining a high data transmission rate, comprising the steps of:

-channel coding a stream of user data to which redundant information is added in accordance with a first channel coding scheme;

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-radio transmitting said stream on a first frequency hopping radio channel, wherein a transmitter antenna for transmitting said stream alternates between two antennas that are separated spatially or with respect to polarization so as to obtain antenna diversity;

-measuring (S3) a transmission quality of the radio transmission; and if said transmission quality exceeds a predetermined threshold:

-switching (S6) from the first coding scheme to a second coding scheme that does not include added redundant information in the stream of user data; and

-effecting radio transmission on a second non frequency hopping radio channel without switching the transmitter antenna.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 2/12/01 was not properly signed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. Copy of The information disclosure statement (IDS) submitted on 2/12/01 is being enclosed after having been signed by examiner.

Allowable Subject Matter

5. Claims 1-5, 7-17 and 19 are allowed.

REASONS FOR ALLOWANCE

6. The following is an examiner's statement of reasons for allowance:

The prior art of record does not disclose, teach or suggest implicitly or directly the following limitations in combination with other limitations of the claims:

As recited by claim 1,

“switching (S6) radio channels for sending said stream from the first frequency hopping radio channel (FH-RCH) to a second non frequency hopping radio channel (NH RCH) in conjunction with the step of switching from the first channel coding scheme to the second channel coding scheme.”

As recited by claim 11,

“means that when changing a coding scheme from coded to uncoded transmission of user data functions to also change a radio channel for said radio link (RL) from a frequency hopping radio channel to a non frequency hopping radio channel (FH RCH NH RCH)”.

As recited by claim 13,

-“radio transmitting said stream on a first frequency hopping radio channel, wherein a transmitter antenna for transmitting said stream alternates between two antennas that are separated spatially or with respect to polarization so as to obtain antenna diversity;

-measuring (S3) a transmission quality of the radio transmission; and if said transmission quality exceeds a predetermined threshold:

-switching (S6) from the first coding scheme to a second coding scheme that does not include added redundant information in the stream of user data; and

-effecting radio transmission on a second non frequency hopping radio channel without switching the transmitter antenna”.

As recited by claim 15,

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- “changing the coding scheme for coding said first user data stream from any of said first three coding schemes to said fourth coding scheme, to produce an uncoded user data stream, due to the transmission quality reaching a first threshold value; and
- transmitting the uncoded user data stream, on a second, non frequency hopping. radio channel, within the first cell.”

As recited by claim 17,

- “means for changing the radio channel for the radio link from a first frequency hopping radio channel to a second non frequency hopping radio channel when a change of channel coding is made from any of said first three channel coding schemes to said fourth coding scheme” .

As recited by claim 19,

- switching radio channels for sending said stream from the first frequency hopping radio channel to a second non frequency hopping radio channel in conjunction with the step of switching from the first channel coding scheme to the second channel coding scheme.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”


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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Inder P Mehra
Examiner
Art Unit 2666
3/3/05


DANG TON
TECHNICAL EXAMINER